

ORDER NO. 1626

UNITED STATES OF AMERICA  
POSTAL REGULATORY COMMISSION  
WASHINGTON, DC 20268-0001

Before Commissioners:

Ruth Y. Goldway, Chairman;  
Robert G. Taub, Vice Chairman;  
Mark Acton;  
Tony Hammond; and  
Nanci E. Langley

Priorities for Future Data Collection  
And Analytical Work Relating to  
Periodic Reporting

Docket No. RM2011-3

ORDER SETTING NEAR-TERM PRIORITIES  
AND REQUESTING RELATED REPORTS

(Issued January 18, 2013)

The purpose of this rulemaking is to identify priorities to guide the Postal Service in pursuing studies and data collection efforts that would improve the accuracy of the Postal Service's cost, volume, and revenue estimates used in its periodic reporting. This rulemaking provides a framework in which priorities can be selected in a cooperative way, with the input of the Commission, mailers, and the public taken into account early enough in the research process to allow that research to reflect the insights and concerns of the postal community as a whole. To further that goal, this

order reaches conclusions regarding which of the study areas that have been nominated for further research should be made near-term priorities.

#### I. Near-Term Research Priorities

In its initial comments in this docket, the Postal Service proposed that the postal community distinguish between candidate studies that would be suitable to undertake in the near term, those that would be suitable to undertake in the medium term, and those that would be appropriate to undertake in the long term. Beneficial studies that can be conducted primarily with data already collected for management purposes and that apply analytical methods that are not controversial were considered appropriate near-term projects.<sup>1</sup>

The Commission generally agrees with the priorities that the Postal Service describes in its initial comments in this docket with respect to which research projects would be beneficial to undertake, and of those, which should be undertaken in the near, medium, and long term. This order modifies the categorization of research priorities expressed in the Postal Service's initial comments in only one respect. Updating the Postal Service's model of city delivery carrier street time variability was characterized as a medium-term priority in the Postal Service's initial comments. Since then, the Commission, the Postal Service, and interested mailers have reached a consensus that updating the Postal Service's model of city delivery carrier street time variability should be pursued in the near term.

Based on the inquiries already undertaken in this docket, the Commission concludes that remodeling the volume variability of city delivery street time, recalculating the elasticity of purchased transportation costs with respect to purchased transportation capacity, recalculating the volume variability of postmaster costs, and

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<sup>1</sup> In its initial comments, the Postal Service proposed that studies that require special data collection efforts but would not involve settling major controversies concerning analytical methods be considered appropriate medium-term projects. Nominated study areas that would require both special data collection efforts and the resolution of controversial methodological issues were considered appropriate long-term projects. Initial Comments of the United States Postal Service, February 18, 2011, at 3-4 (Postal Service Comments).

including new special services products in the calculation of volume variable window service costs should be made near-term research priorities.

The Commission has also reached conclusions about what relative priority should be given to those research projects that have been identified as appropriate for the near term. These conclusions result from weighing a number of factors. Among the most important is the size of the cost pool whose attribution could be made more accurate by the project. Also important is the degree to which operations have changed since the underlying data were collected. Another important factor is the stability of the operational area under study in light of the implementation of such recent operational reforms as the Mail Processing Network Rationalization (MPNR) initiative, and the Post Office Structure Plan (POStPlan) initiative. Within the research projects that have been identified as suitable for pursuing in the near term, these considerations suggest that the order of priority should be re-estimating the volume variability of carrier street time, recalculating the cost elasticity of purchased highway transportation capacity, recalculating postmaster cost variability, and re-estimating product shares of window service costs. Each of these conclusions is explained in more detail below.

#### A. City Delivery Carrier Street Time Costs

In Fiscal Year (FY) 2012, the Postal Service incurred \$12.1 billion of city delivery carrier street costs. The data underlying the current econometric model of the volume variability of street time costs were collected in 2002. Major changes have since been made in the structure and procedures followed in the city delivery operation which have had a substantial impact on how costs are incurred. These include the delivery point sequencing of letters and flats, the growing importance of parcel delivery, and the widespread reorganization of carrier routes that recently took place under the Carrier Optimal Routing (COR) initiative.

The potential impact of updating the econometric model of the volume variability of street time is by far the largest of all of the research projects that the Commission has identified as appropriate to be pursued in the near term. In addition, the carrier street

time function is likely to be less impacted by the MPNR and POSTPlan initiatives than the other research areas that the Commission has identified as appropriate to be pursued in the near term.

In May, and again in August of 2012, the Commission sponsored technical conferences in this docket that investigated the feasibility of using data from databases compiled to manage city carrier operations to develop improved estimates of carrier street time cost pools and their volume variability. At the second technical conference, the Postal Service presented a “Scoping Study,” which analyzed the feasibility of using several operational carrier databases to update and improve estimates of carrier street time variability. It also responded to questions from conference participants.<sup>2</sup>

The Scoping Study concluded that while the COR data and the Managed Service Point (MSP) data would not be suitable data sources, the Form 3999 Dataset held potential for updating street time cost pools and that daily volumes from the Delivery Operations Information System (DOIS) held potential for estimating the independent variables needed in econometric models of street time variability.<sup>3</sup>

The following areas of consensus emerged from the Second Technical Conference:

- Further investigation is needed to determine whether it would be feasible to use DOIS, especially the quality of time data, to estimate econometric models of street time variability;
- A special study of deviation parcel, accountable, and possibly collection times and volumes would be needed to accurately determine time pool percentages and estimate econometric models of volume variability;

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<sup>2</sup> Docket No. RM2011-3, Second Technical Conference, August 15, 2012.

<sup>3</sup> Docket No. RM2011-3, Scoping Study Report of the United States Postal Service, May 25, 2012.

- Because bundles of different mail shapes have a significant impact on carrier street time costs, different types of bundle variables should be considered for inclusion in a volume variability model.

The Commission asked the Postal Service to file a document discussing any new developments in its costing research program since it filed its initial comments in this docket, including any changes in its investigation of city delivery carrier costs. The Postal Service stated in its October 23, 2012 response, that it “will begin a city carrier street time study, based on the Scoping Study filed earlier this year, in 2013, and will update the Commission on the study’s progress periodically.”<sup>4</sup>

#### B. Purchased Highway Transportation Costs

Currently, the Postal Service calculates proxies for the volume variable costs of each mail class and subclass that utilizes the highway transportation network by multiplying the accrued costs in each highway account category by the elasticity of purchased highway transportation costs with respect to capacity (expressed as cubic-foot-miles), and distributing the resulting volume variable cost proxies to each mail class and product using distribution keys developed from the Transportation Cost System (TRACS) data system.

The elasticities currently used were established in Docket No. R2000-1. Postal Service witness Bradley used translog econometric models to develop these elasticities.<sup>5</sup> Using operational data from the Highway Contract Support System (HCSS),<sup>6</sup> witness Bradley estimated 17 translog econometric equations, where each equation represented a highway transportation account category such as Intra-P&DC

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<sup>4</sup> Docket No. RM2011-3, Update Regarding Postal Service Priorities for Future Cost Studies, October 23, 2012, at 2.

<sup>5</sup> Docket No. R2000-1, Direct Testimony of Michael D. Bradley on Behalf of the United States Postal Service, January 12, 2000.

<sup>6</sup> *Id.* at 22.

highway transportation. *Id.* at 29. Separate equations were estimated for regular contracts, plant-load contracts, and Box Route contracts. These models were designed to control for differences in geography and type of vehicle (e.g., vans versus trailers).

Given this history, the Postal Service's initial comments identify three issues that warrant further research. The first is whether it would be beneficial to recalculate the cost elasticity of purchased highway transportation with respect to changes in capacity, using current data. The second is whether the econometric model used to calculate that cost elasticity needs to be reviewed and revised. The third issue is whether the relationship between changes in mail volume and changes in the intermediate driver of purchased highway transportation costs (purchased highway transportation capacity) should continue to be assumed to be proportional, or whether that relationship should be empirically modeled.

In this docket, the Postal Service advocates recalculating the elasticity of purchased highway transportation costs with respect to purchased highway transportation capacity as a near-term research priority. Postal Service Comments at 5. The Commission agrees that this should be made a near-term priority. The costs of doing so appear to be relatively small, since the data can be assembled from regular reports compiled for management purposes.

The benefits of rerunning the established model using current data are potentially large. In FY 2012, the Postal Service incurred \$6.6 billion in accrued purchased highway transportation costs. It has been approximately 13 years since that elasticity was calculated. The Postal Service observes that the transportation network has been significantly restructured over that time. *Id.* at 8. For these reasons, the Postal Service should include recalculation of the cost elasticity of transportation capacity in its near-term research agenda.

In addition, the Commission and the Postal Service share the view that it would be beneficial for the Postal Service to investigate the validity of the current assumption that purchased highway transportation capacity varies in direct proportion to piece

volume.<sup>7</sup> If this assumption is inaccurate, it will yield a biased estimate of product attributable costs for highway transportation. As the Postal Service notes, the proportional relationship between purchased highway transportation capacity and mail volume has not been empirically tested. *Id.* at 6.

The Postal Service notes that the regression model of purchased transportation cost variability itself might benefit from further refinement. It also notes that the assumption that purchased highway transportation costs vary in proportion to volume would benefit from more rigorous examination. The Commission agrees, but regards these tasks as suitable for pursuing in the medium term or the long term. Accordingly, after the Postal Service obtains an updated estimate of the elasticity of purchased highway transportation costs with respect to changes in capacity, the Postal Service should provide a report on the prospective costs and benefits of modifying the current regression model, and on the feasibility of modeling the elasticity of capacity with respect to volume.<sup>8</sup>

### C. Postmaster Costs

The estimate of the volume variability of postmaster costs that is currently in use is the output of a 1984 econometric model that uses data collected in FY 1978 and 1979. The model regresses postmaster minimum salaries on the Work Service Credits that qualify a postmaster for that minimum salary. This method assumes that the set of Work Service Credits that applies to each postmaster varies in proportion to volume.

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<sup>7</sup> Using the elasticity of purchased highway transportation costs with respect to transportation capacity as a proxy for volume variable purchased highway transportation costs assumes proportional variability between transportation capacity and mail volume.

<sup>8</sup> The Commission contemplates that the Postal Service will provide a report that describes the data that would be required to model this relationship, the possible sources of these necessary data, and an estimate of the expense of collecting or developing these data. In particular, the report should describe the uses that would be made of the Surface Visibility, the Transportation Information Management System (TIMES), and the Intelligent Mail barcode databases in such a model.

Given this history, the Postal Service's initial comments identify three issues that warrant further research. *Id.* at 9. The first is whether it would be beneficial to recalculate the cost elasticity of postmaster labor with respect to changes in Work Service Credits, using current data. The second is whether the econometric model used to calculate that cost elasticity needs to be reviewed and revised. The third issue is whether the relationship between changes in mail volume and changes in the intermediate driver of postmaster labor costs (Work Service Credits) should continue to be assumed to be proportional, or whether that relationship should be empirically modeled.

The Commission and the Postal Service agree that recalculating the volume variability of postmaster costs based on current postmaster salaries and Workload Service Credit data is a task that should be pursued in the near term. The costs of doing so appear to be relatively small, since the data is available from regular reports compiled for management purposes.

The benefits of rerunning the established model using current data are potentially large. In FY 2012, the Postal Service incurred \$2.2 billion in accrued postmaster salaries. The current volume variability estimate relies on data that are more than 30 years old. Recalculating that variability under the current method using current data, therefore, is highly likely to improve the accuracy of the result. Therefore, the Postal Service should include recalculation of the volume variability of postmaster costs in its near-term research agenda.

The Postal Service notes that the regression model of postmaster cost variability itself might benefit from further refinement. It also notes that the assumption that Work Service Credits vary in proportion to volume would benefit from more rigorous examination. The Commission agrees, but regards these tasks as suitable for pursuing in the medium term, and long term, respectively.



#### D. Window Service Time

In its initial comments in this docket, the Postal Service observes that there is a need to estimate the costs of “certain relatively small[-volume] retail products such as mailing and shipping supplies and greeting cards.” *Id.* at 10. It also notes that the current In-Office Cost System (IOCS) data collection system is not designed to calculate the window service costs of these small-volume retail products. Therefore, methods for identifying the costs of such products that are consistent with the established IOCS-based methods used for larger volume products need to be investigated. The Commission agrees that there is such a need, and that investigating means of estimating these costs should be made a near-term priority.

#### E. Medium-Term and Long-Term Research Areas

The majority of the research areas that are listed in the Postal Service's initial comments as candidates for further research in the medium and the long term are not addressed in this Order.<sup>9</sup> While the Commission views these research areas as important, there has not yet been sufficient public discussion of those topics to support a finding as to what their relative priorities should be. In the future, it will be necessary to inquire into the potential sources of data, the cost of collecting those data, and the analytical methods under consideration in those areas before reaching conclusions as to what their relative priority should be.

## II. Reports

Having reached conclusions regarding the priority in which research into various areas of cost incurrence should be pursued, the next step is for the Postal Service to

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<sup>9</sup> Space-related costs and vehicle service driver time are areas of future research that the Postal Service lists in its initial comments as appropriate to pursue in the medium term that are not addressed by this Order. Mail processing time, city delivery carrier in-office time, window service costs, and supervisor time are areas of future research that the Postal Service lists as appropriate to pursue in the long term that are not addressed in this Order. *Id.* at 17-22.

inform the postal community of the status of their current research activity. The Postal Service should provide the reports described below, on or before April 18, 2013.

A. City Delivery Carrier Street Time

In its April 18, 2013 report, the Postal Service should describe the progress it has made investigating the three areas identified on pages 4 and 5 of this Order as needing further research. In particular, the Postal Service should describe what further testing of the DOIS data has been done and what additional conclusions the Postal Service has drawn concerning the feasibility of using those data to model the volume variability of street time. The Commission would also like to be apprised of the progress that the Postal Service has made designing and implementing a field study of deviation parcels, accountables, and/or collection mail, including what sample designs are under consideration, and what sampling methods are contemplated. The Commission would like the Postal Service to describe how it plans to address the issue of defining bundles that carriers take to the street for purposes of econometric modeling. Finally, the Commission requests the Postal Service to describe the state of its research regarding specifying a new econometric model of the volume variability of city delivery carrier street time costs.

B. Purchased Highway Transportation

In its April 18, 2013 report, the Postal Service should prepare and submit a plan for recalculating the cost elasticity of purchased highway transportation capacity. The submission should include a description of the plan, the data sources that will be used, the resources that would be required, and a time line for implementation.

The Commission recognizes that the updated calculation needs to take the Postal Service's MPNR initiative into account, since the form that the MPNR ultimately takes and the timing of its implementation are intended to reduce the amount of excess purchased highway transportation capacity. If it does, there will be a likely impact on the cost elasticity of that capacity.

The Commission will leave to the Postal Service the decision of whether updating this calculation should be undertaken before it completes its MPNR. However, if the Postal Service plans to update its calculation of the cost elasticity of purchased highway transportation capacity during the implementation of the MPNR, the Commission believes that a subsequent update that reflects the effects of a fully-implemented MPNR will also be necessary. The Commission requests that the Postal Service describe how it would coordinate an update of this calculation with its timetable for implementing its MPNR.

#### C. Postmaster Costs

In its April 18, 2013 report, the Postal Service should prepare and submit a plan for recalculating the elasticity of postmaster labor costs with respect to Work Service Credits. The submission should include a description of the plan, the data sources that will be used, the resources that would be required, and a time line for implementation.

The Commission notes that postmaster salary costs may be substantially impacted by the pace of implementation of the Postal Service's nationwide POSTPlan initiative to reduce the hours of operations at smaller offices. The Commission will leave to the Postal Service the decision of whether updating this calculation should be undertaken before it completes its POSTPlan. However, if the Postal Service updates this calculation before the Postal Service completes its POSTPlan initiative in September of 2014, it may be appropriate to undertake another update after the POSTPlan initiative has run its course.<sup>10</sup>

#### D. Window Service Time

In its April 18, 2013 report, the Postal Service should describe the candidate methods that it is considering for estimating the attributable costs of small-volume retail

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<sup>10</sup> The need for a post-implementation update would increase if the method of payment of postmasters were to change as a result of implementing the POSTPlan.

services newly designated as individual products, such as mailing and shipping supplies and greeting cards.

*It is ordered:*

The Postal Service is directed to submit a report to the Commission on or before April 18, 2013, that provides the information described in the body of this Order.

By the Commission.

Ruth Ann Abrams  
Acting Secretary